

CLAIM AMENDMENTS

1. (CURRENTLY AMENDED) A method for quadrature-bias compensation in a Coriolis gyro, whose resonator is in the form of a coupled system comprising a first and a second linear oscillator, in which the first oscillator is attached to a gyro frame of the Coriolis gyro by means of first spring elements and the second oscillator is attached to the first oscillator by means of second spring elements, having the following steps:

- determination of the quadrature bias of the Coriolis gyro,
- production of an electrostatic field in order to vary the mutual alignment of the two oscillators with respect to one another, with the electrostatic field producing a constant electrostatic force which causes a change in the alignment of the first spring elements and/or a change in the alignment of the second spring elements, and with the alignment/strength of the electrostatic field being regulated such that the determined quadrature bias is as small as possible.

2. (CANCELED)

3. (PREVIOUSLY PRESENTED) The method as claimed in claim 1, characterized in that the alignment of the first spring elements is varied by varying the position/alignment of the first oscillator by means of the electrostatic field, and in that the alignment of the second spring elements is varied by varying the position/alignment of the second oscillator by means of the electrostatic field.

4. (PREVIOUSLY PRESENTED) The method as claimed in claim 1, characterized in that the electrical field results in the alignments of the first and second spring elements being made orthogonal with respect to one another.

5. (CANCELED)

6. (PREVIOUSLY PRESENTED) A Coriolis gyro, having a first resonator which is in the form of a coupled system comprising a first and a second linear oscillator, with the first oscillator being attached to a gyro frame of the Coriolis gyro by means of first spring elements, and the second oscillator being attached to the first oscillator by means of second spring elements, having,

- a device for production of an electrostatic field by means of which the alignment of the two oscillators with respect to one another can be varied, in which the electrostatic field produces a constant electrostatic force which varies the alignment angle of the first spring elements with respect to the gyro frame and/or the alignment angle of the second spring elements with respect to the first oscillator,

- a device for determination of any quadrature bias of the Coriolis gyro, and

- a control loop, by means of which the strength of the electrostatic field is regulated as a function of the determined quadrature bias such that the determined quadrature bias is as small as possible.

7. (CANCELED)

8. (CANCELED)

9. (CANCELED)

10. (PREVIOUSLY PRESENTED) The Coriolis gyro as claimed in claim 6, characterized in that all of the second spring elements which connect the second oscillator to the first oscillator are designed such that force is introduced from the first oscillator to the second oscillator essentially from one side of the first oscillator.

11. (PREVIOUSLY PRESENTED) The Coriolis gyro as claimed in claim 6, characterized in that all of the first spring elements which connect the first oscillator to the gyro frame of the Coriolis gyro are arranged parallel and on the same plane as one another, with the start and end points of the first spring elements each being located on a common axis.

12. (PREVIOUSLY PRESENTED) A Coriolis gyro as claimed in claim 6, characterized by a second resonator, which is in the form of a coupled system comprising a first and a second linear oscillator, with the first resonator being mechanically/electrostatically connected/coupled to the second resonator such that the two resonators can be caused to oscillate in antiphase with respect to one another along a common oscillation axis.

13. (CANCELED)

14. (PREVIOUSLY PRESENTED) The Coriolis gyro as claimed in claim 12, characterized in that the configurations of the first and of the second resonator are identical, with the resonators being arranged axially symmetrically with respect to one another, with respect to an axis of symmetry which is at right angles to the common oscillation axis.

15. (CANCELED)